

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Docket No: Q82625

Tsukasa AGA

Appln. No.: 10/502,014

Group Art Unit: 1713

Confirmation No.: 8458

Examiner: Mei Qi Huang

Filed: July 20, 2004

For:

AQUEOUS WATER-AND OIL-REPELLENT DISPERSION

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

A Petition for Extension of Time was filed on August 3, 2006, extending the date for replying to the Notice of Panel Decision from Pre-Appeal Brief Review of May 5, 2006 from June 5, 2006 to August 5, 2006. In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

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I. REAL PARTY IN INTEREST

The real party in interest is Daikin Industries, Ltd. of Osaka, Japan.

II. RELATED APPEALS AND INTERFERENCES

Appellants, Appellants' legal representative and the Assignee of this application are not aware of any other appeals or interferences that will directly affect, or be affected by, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-10 are pending in the application.

This is an appeal from the Examiner's rejection of claims 1-10.

IV. STATUS OF AMENDMENTS

An Amendment under 37 C.F.R. § 1.116 was filed on March 20, 2006 concurrently with a Notice of Appeal, Pre-Appeal Brief Request for Review and Petition for Extension of Time and the required fee. The Amendment was filed to correct a typographical error in claim 1 by changing the word "of" to "or" in line 10 of the claim. However, the Examiner denied entry of the Amendment as allegedly changing the scope of the claims. During a telephone Interview, Applicants' representative pointed out that the proposed amendment to claim 1 was merely for the purpose of correcting a typographical error and that the Amendment should have been entered as at least placing the application in better form for appeal and/or complying with a requirement as to form in accordance with 37 C.F.R. § 1.116(b).

The Examiner agreed that the Amendment should have been entered and suggested that Appellants present the amendment concurrent with the filing of an Appeal Brief, RCE or subsequent paper. Because the rules do not allow for the submission of a new or non-admitted Amendment concurrently with the filing of an Appeal Brief (see 37 C.F.R. §41.37(c)(2)), an Amendment was submitted on August 3, 2006, prior to the filing of the present Appeal Brief in accordance with 37 C.F.R. § 41.33(a). Entry of the Amendment submitted on August 3, 2006 is respectfully requested as placing the application in better form for appeal and/or as complying with a requirement as to form in accordance with 37 C.F.R. § 1.116, further in view of the telephone Interview of April 6, 2006, which has been made of record by the Interview Statement filed April 10, 2006.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention relates to an aqueous water- and oil-repellent dispersion.

Particularly it relates to an aqueous water- and oil-repellant dispersion in which a fluorinecontaining polymer is dispersed in the presence of a cationic surfactant and a nonionic
surfactant. Specification, page 1, lines 6-10. The invention also relates to a method of
processing a textile using the dispersion and to a textile to which the dispersion is applied.

Specification, page 3, lines 12-16.

It is well known in the art that a polymer of a polymerizable compound having a perfluoroalkyl or perfluoroalkenyl group and an acrylate or methacrylate group can be used as a water- and oil-repellent for a fibrous fabric. Particularly, an aqueous dispersion which is prepared by dispersing the polymer in an aqueous medium by means of an emulsifier is widely and industrially used. Specification, page 1, lines 13-19.

However, in a water- and oil-repellent treatment bath, which is prepared by diluting a conventional aqueous dispersion, the dispersion is destroyed by the mechanical impact that is applied when the substrate to be treated enters into the treatment bath or when the substrate emerges from the treatment bath, and then an aggregate of the polymer is generated. Conventional aqueous dispersions often have the problem that the aggregates attach to the substrate to give a substrate soil. Specification, page 1, lines 20-28.

 $RO[CH_2CH(CH_3)O]_a$ - $(CH_2CH_2O)_bH$ has been considered as a nonionic surfactant for a water- and oil-repellent composition, wherein R is a linear or branched alkyl or alkenyl group having at least 8 carbon atoms. However, when R is a linear alkyl group or R is a branched

alkyl group having a side chain having at most 2 carbon atoms, impact resistance of the diluted liquid of the polymer dispersion is inadequate. Therefore, undesirable aggregates are disadvantageously generated leading to deterioration of water- and oil-repellency. Specification, page 2, lines 1-9.

The present inventors have found that a diluted liquid of the aqueous dispersion of the aqueous water- and oil-repellent dispersion of the present invention is not destroyed by the mechanical impact exerted from a substrate or fabric in a water- and oil-repellent treatment bath and substrate pollution is not caused. Therefore, the water- and oil- repellency properties of the dispersion are not deteriorated. Specification, page 2, lines 12 to 20. Additionally, a dilution liquid, which is obtained by diluting the aqueous water- and oil-repellent dispersion of the present invention with water and/or an organic solvent, is excellent in impact resistance. Specification, page, lines 8-11.

The present invention is defined primarily by one independent claim on appeal, namely claim 1, which provides for an aqueous water- and oil-repellent dispersion comprising: (A) a homopolymer or copolymer comprising at least one polymerizable compound having a perfluoroalkyl or perfluoroalkenyl group and an acrylate or methacrylate group, or a copolymer comprising said polymerizable compound and another compound copolymerizable therewith; and (B) a surfactant which comprises a cationic surfactant and a nonionic surfactant of the formula (I):

$$R^{1}O[CH2CH(CH3)O]a-(CH2CH2O)bH (I)$$

wherein R¹ is a branched alkyl or alkenyl group in which a main chain has at least 5 carbon atoms and three or more side chains having a total of at least 3 carbon atoms in all side chains, a is an integer of at least 3, and b is an integer of 10 to 30. Specification, page 2, line 21 to page 3, line 7 and original claim 2.

Claim 2 recites that in R¹ of formula (I), each side chain is an alkyl group. Specification, page 6, lines 27-28.

Claim 3 recites that R¹ in the formula (I) has at least 10 carbon atoms. Specification, page 7, lines 2-3.

Claim 4 recites that in R¹ of the formula (I), each side chain is an alkyl group having 1 to 3 carbon atoms. Specification, page 7, line 1.

Claim 5 recites that in R¹ in the formula (I), each side chain is a methyl group. Specification, page 7, lines 1-2.

Claim 6 recites that R¹ in the formula (I) is a C₁₃ isotridecyl group having 4 side chain methyl groups, that is CH₃CH(CH₃)CH₂CH(CH₃)CH₂CH(CH₃)CH₂CH(CH₃)CH₂-. Specification, page 7, lines 5-7.

Claim 7 recites that R^1 in the formula (I) is a C_{13} isotridecyl group having 6 side-chain methyl groups, that is, $CH_3C(CH_3)_2CH_2C(CH_3)_2CH_2C(CH_3)_2CH_2$ -, or

CH₂(CH₃)CH(CH₃)CH(CH₃)CH(CH₃)CH(CH₃)CH(CH₃)CH₂-. Specification, page 7, lines 7-9.

Claim 8 recites that R^1 in the formula (I) is a C_{13} isotridecyl group having 3 side-chain ethyl groups, that is, $CH_3CH(C_2H_5)CH_2CH(C_2H_5)CH_2CH(C_2H_5)CH_2$. Specification, page 7, lines 10-12.

Claim 9 recites a method of processing a textile, comprising using the dispersion according to claim 1. Specification, page 3, lines 12-14.

Claim 10 recites a textile, to which the dispersion according to claim 1 is applied. Specification, page 3, lines 15-16.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-10 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent No. 6,610,775 to Oharu et al.

The Examiner considered Oharu et al as disclosing an aqueous water-and oil-repellant dispersion substantially as claimed, including a compound of Formula 5 having the structure shown at col. 9, lines 50-52, which is said to overlap in scope with the claimed nonionic surfactant represented by formula (I) when R¹⁰ represents an <u>alkpolyenyl group</u> having a carbon number of 8 or more. Particularly, the Examiner considered that R¹⁰ would *inherently* have three or more side chains as required by R¹ of present claim 1.

Regarding claim 2-5, the Examiner considered that general Formula 5 at column 9 of Oharu et al, wherein R¹⁰ represents an alkyl group having a carbon number of 8 or more and may be a linear structure or a branched structure, anticipates or renders obvious a branched structure having methyl groups and incorporating three or more branches as claimed in the present application. The Examiner further asserts that one of ordinary skill in the art would readily appreciate the teachings of the reference and be able to at once envisage a branched structure having methyl groups and employ three or more branches in the nonionic surfactant with the general formula.

VII. ARGUMENT

A. Grouping of the Claims

Claims 1-10 stand or fall together for purposes of this appeal only.

B. The rejection of claims 1-10 under under 35 U.S.C. § 102(e) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent No. 6,610,775 to Oharu et al should be reversed because the reference does not disclose, teach or suggest the present claimed invention.

The claims on appeal are directed to an aqueous water- and oil-repellent dispersion comprising: a homopolymer or copolymer (A); and a surfactant (B) which comprises a cationic surfactant and a nonionic surfactant of the Formula (I):

$$R^{1}O[CH_{2}CH(CH_{3})O]_{a}-(CH_{2}CH_{2}O)_{b}H$$
 (I)

A characteristic feature of the invention is that R¹ of Formula (I) is a branched alkyl or alkenyl group including a main chain having at least 5 carbon atoms <u>and three or more side</u>

<u>chains</u> having a total of at least three carbon atoms in all side chains.

The alkyl group, the alkenyl group or the alkpolyenyl group in the surfactant (b¹) of Oharu et al. preferably has a carbon number of from 4 to 26 and may be of a linear or branched structure (col. 9, lines 22-26). This corresponds to R¹⁰ of formula F5 of Oharu et al. The Examiner considers that when R¹⁰ represents an alkpolyenyl group, R¹⁰ would inherently have three or more side chains as required by R¹ of the present invention.

To the contrary, the "alkyl" group mentioned by Oharu et al. is a saturated hydrocarbon. The "alkenyl" group is a hydrocarbon group having an unsaturated bond. The "alkpolyenyl" group is a hydrocarbon having a <u>plurality</u> of unsaturated bonds.

Appellant previously submitted database material (four (4) pages) together with the Amendment under 37 C.F.R. § 1.116 filed February 21, 2006 showing various compounds having an "alkpolyenyl" group including a plurality of unsaturated bonds characteristic of such group.

The number of unsaturated bonds in an alkpolyenyl group has nothing to do with the number of side chains, and therefore there is no basis for the Examiner's assertion that an "alkpolyenyl group" would *inherently* have three or more side chains. That is, the mere expression "alkpolyenyl group" does not describe a branched alkenyl group of formula (I) of present claim 1 having three or more side chains having a total of at least three carbon atoms in all side chains.

For this reason alone, Oharu et al does not anticipate the claims on appeal. Moreover, there is nothing in the cited prior art which suggests the desirability, and hence the unobviousness, of employing a surfactant (B) of present claim 1 having the specifically claimed structure.

In the Advisory Action dated March 6, 2006, the Examiner maintained that the "alkpolyenyl" group represented by R¹⁰ of Formula 5 of Oharu et al. is a polymeric group formed by polymerization of unsaturated hydrocarbons where the unsaturation is consumed by the polymerization process. Particularly, the Examiner maintained his position as to the meaning of "alkpolyenyl" because "such definition is not found in the original specification". By "original specification" Appellant understands that the Examiner is referring to Oharu et al.'s specification. However, Appellant has submitted objective evidence as to the meaning of

"alkpolyenyl", and the Examiner has failed to address the database material submitted together with the Amendment filed February 21, 2006 which clearly shows that "alkpolyenyl group" is a hydrocarbon group having a <u>plurality</u> of unsaturated bonds.

Applicants respectfully submit that the Examiner has improperly maintained the rejection in the face of the totality of the evidence provided on the record, which establishes that the cited reference does not disclose, teach or suggest the present invention and also that there is no motivation for one of ordinary skill in the art to modify the reference with a reasonable expectation of success.

The ultimate determination of patentability is based on the entire record, by a preponderance of evidence, with due consideration to the persuasiveness of any arguments and any secondary evidence. See MPEP § 2142 citing *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). The legal standard of "a preponderance of evidence" requires the evidence to be more convincing than the evidence which is offered in opposition to it. When an Applicant submits evidence, whether in the specification as originally filed or in reply to a rejection, the Examiner must reconsider the patentability of the claimed invention and the decision on patentability must be made based upon consideration of all the evidence, including the evidence submitted by the Examiner and the evidence submitted by the Applicant. A decision to make or maintain a rejection in the face of all the evidence must show that it was based on the totality of the evidence. Facts established by rebuttal evidence must be evaluated along with the facts on which the conclusion was reached, not against the conclusion itself. See MPEP § 2142 citing *In re Eli Lilly & Co.*, 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990).

In this case, the Examiner has made statements regarding the definition of the term "alkpolyenyl group", contradicted by objective evidence of the database material provided by Appellant. The Examiner has not offered any evidence in opposition to the database material yet maintains the rejection. That is, Appellants maintain that the final rejection does not establish a prima facie case of obviousness.

In summary, the main issue at hand is whether the "alkpolyenyl group" represented by R¹⁰ of Formula 5 of Oharu et al. describes a branched alkenyl group of Formula (I) of present claim 1 having three or more side chains. Even if the Examiner were correct in stating that "alkpolyenyl" is a polymeric group formed by polymerization of unsaturated hydrocarbons, such definition would not lead to the surfactant (B) of present claim 1 having the specifically claimed structure (i.e., where R¹ has three or more side chains having a total of at least three carbon atoms in all side chains).

Notwithstanding the foregoing, the present invention provides unexpectedly superior results over the prior art as shown based on the results of comparative testing presented in the specification, and discussed in detail in the Remarks portion of the Amendment under 37 C.F.R. § 1.116 filed February 21, 2006. Specifically, R¹ of the surfactant of formula (I) of claim 1 having three or more side chains is an essential feature for achieving the effects of the invention, as follows.

The nonionic surfactant (POPPOE-ITDE) used in Example 1 is a mixture of three compounds, that is (1) a compound having four carbon atoms in side chains (see claim 6); (2) a

compound having six carbon atoms (six methyl groups) in side chains (see claim 7); and (3) a compound having six carbon atoms (three methyl groups) in side chains (see claim 8).¹

In contrast, the Comparative Examples employed the following nonionic surfactants.

	Nonionic Surfactant	Carbon number of side chains in nonionic surfactant	
Comparative Example 1	Polyoxyethylene lauryl ether (POE-LE)	0	
Comparative Example 2	Cationic surfactant is not used		
Comparative Example 3	Polyoxyethylene sorbitan monooleate	Cyclic (not branched)	
Comparative Example 4	Polyoxypropylene polyoxyethylene cetyl ether (POPPOE-CE)	0	

The subject dispersions were evaluated with respect to water- and oil-repellency, mechanical property, chemical property and storage stability, the results of which are set forth in Table B at page 17 of the Specification. As shown therein, the aqueous water- and oil-repellent dispersion of the invention including a surfactant (B) comprising a cationic surfactant and a nonionic surfactant of formula (I) where R¹ has three or more side chains provides remarkably enhanced mechanical property while retaining a high level of water- and oil-repellency as compared to the above-noted Comparative Examples employing a nonionic surfactant having no side chains. showing that surfactant (B) comprising a cationic surfactant

¹ The POE-SMO (polyoxyethylene sorbitan monooleate) used in Example 4 is outside the scope of the nonionic surfactant as defined in present claim 1.

and a nonionic surfactant of Formula (I) where R¹ has three or more side chains, provides remarkably enhanced properties as compared to Comparative Examples employing a nonionic surfactant having <u>no</u> side chains.

Thus, in summary, the "alkpolyenyl group" represented by R¹⁰ of Formula 5 of Oharu et al. does not describe a branched alkenyl group of Formula (I) of present claim 1 having three or more side chains. Moreover, there is nothing in the cited prior art which suggests the desirability of modifying the compound of Formula 5 of Oharu et al. to have the specifically claimed structure. Thus, the present invention as recited in claim 1 is not anticipated nor rendered obvious by Oharu et al. Claims 2-10 depend, directly or indirectly, from claim 1 and are patentable for at least the same reason.

Accordingly, Appellant respectfully requests the Board to reverse the rejection under 35 U.S.C. § 102(b) or in the alternative under 35 U.S.C. § 103 based on Oharu et al.

Unless a check is submitted herewith for the fee required under 37 C.F.R. §41.37(a) and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

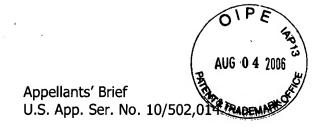
SUGHRUE MION, PLLC

Telephone: (202) 293-7060 Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

Date: August 4, 2006



CLAIMS APPENDIX

CLAIMS 1-10 ON APPEAL (upon entry of the Amendment filed August 3, 2006):

- **1. (previously presented):** An aqueous water- and oil-repellent dispersion comprising:
- (A) a homopolymer or copolymer comprising at least one polymerizable compound having a perfluoroalkyl or perfluoroalkenyl group and an acrylate or methacrylate group, or a copolymer comprising said polymerizable compound and another compound copolymerizable therewith, and
- (B) a surfactant which comprises a cationic surfactant and a nonionic surfactant of the formula (I):

$$R^{1}O[CH_{2}CH(CH_{3})O]_{a}-(CH_{2}CH_{2}O)_{b}H$$
 (I)

wherein R¹ is a branched alkyl or alkenyl group including a main chain having at least 5 carbon atoms and three or more side chains having a total of at least 3 carbon atoms in all side chains,

a is an integer of at least 3, and b is an integer of 10 to 30.

2. (previously presented): The dispersion according to claim 1, wherein, in R¹ of the formula (I), each side chain is an alkyl group.

- **3. (original):** The dispersion according to claim 1, wherein R¹ in the formula (I) has at least 10 carbon atoms.
- **4. (previously presented):** The dispersion according to claim 1, wherein, in R¹ of the formula (I), each side chain is an alkyl group having 1 to 3 carbon atoms.
- **5. (previously presented):** The dispersion according to claim 1, wherein, in R¹ of the formula (I), each side chain is a methyl group.
- **6. (original):** The dispersion according to claim 1, wherein R¹ in the formula (I) is a C₁₃ isotridecyl group having 4 side-chain methyl groups, that is, CH₃CH(CH₃)CH₂CH(CH₃)CH₂CH(CH₃)CH₂CH(CH₃)CH₂-.
- **7. (original):** The dispersion according to claim 1, wherein R¹ in the formula (I) is a C₁₃ isotridecyl group having 6 side-chain methyl groups, that is, CH₃C(CH₃)₂CH₂C(CH₃)₂CH₂C(CH₃)₂CH₂-, or CH₂(CH₃)CH(CH₃)CH(CH₃)CH(CH₃)CH(CH₃)CH(CH₃)CH₂-.
- 8. (original): The dispersion according to claim 1, wherein R^1 in the formula (I) is a C_{13} isotridecyl group having 3 side-chain ethyl groups, that is, $CH_3CH(C_2H_5)CH_2CH(C_2H_5)CH_2CH(C_2H_5)CH_2-.$

- **9. (original):** A method of processing a textile, comprising using the dispersion according to claim 1.
 - **10. (original):** A textile, to which the dispersion according to claim 1 is applied.

Appellants' Brief U.S. App. Ser. No. 10/502,014

EVIDENCE APPENDIX:

Pursuant to 37 C.F.R. § 41.37(c)(1)(ix), submitted herewith are copies of any evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or any other evidence entered by the Examiner and relied upon by Appellant in the appeal.

These attached database materials (4 pages) have been submitted on February 21, 2006.

⇒ d ide 1-7

L2 ANSWER 1 OF 7 REGISTRY COPYRIGHT LOS ON STA

RN 17075-74-0 REGISTRY

ED Entered STN: 16 Nov 1984

CN 2.6.10-Dodccatricn-l-amine, N,N-diethyl-3.7.10,11-tetramethyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,6,10-Dodecatrienylamine, N, N-diethyl-3,7,10,11-tetramethyl- (7CI, 8CI) OTHER NAMES:

CN 3,7,10,11-Tetramethyldodeca-2,6,10-trienyldiethylaminc

F9 3D CONCORD

MF C20 H37 N

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

(*File contains numerically searchable property data)

CMe2 Ne Mo No-CH2-CH2-CH2-CH2-CH2-CH2-NBC2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)

5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L2 ANSWER 2 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN <u>17075-73-9</u> REGISTRY

ED Entered STN: 16 Nov 1984

CN 2-Dodecen-l-amine, N, N-diethyl-3, 7, 11-trimethyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Dodecenylamine, N,N-diethyl-3,7,11-trimethyl- (8CI)

FS 3D CONCORD

MF C19 H39 N

LC STN Files: BEILSTEIN*, CA. CAPLUS

(*File contains numerically searchable property data)

Me Me Et2N-CH2-CH-C-(CH2)3-CH-(CH2)3-CHMe2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 3 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN 17074-96-3 REGISTRY

ED Entered STN: 16 Nov 1984

CN 1.2-Ethanediamine, N.N-diethyl-N'-(3,7,11-trimethyl-2,6,10-dodecatrienyl)(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethylenediamine, N.N-diethyl-N'-(3,7,11-trimethyl-2,6,10-dodecatrienyl)-(7CI, 8CI)

OTHER NAMES:

CN N-(Diethylaminosthyl) farnesylamine

FS 3D CONCORD

MF C21 H40 N2
LC STN Files: BEILSTEIN+, CA, CAOLD, CAPLUS, IFICDB, IFIPAT, IFICDB,
USPATFULL
(*File contains numerically searchable property data)

PAGE 1-A

PAGE 1-B

=CMe2

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)

5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L2 ANSWER 4 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN 15130-75-3 REGISTRY

ED Entered STN: 16 Nov 1984

CN 2.6.10-Dodecatrien-1-amine, N.N-diethyl-3.7.11-trimethyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2.6,10-Dodecatrienylamine, N,N-diethyl-3,7,11-trimethyl- (7CI, 8CI) OTHER NAMES:

CN Farnesyl diethylamine

CN N, N-Diethyl-3, 7, 11-trimethyl-2, 6, 10-dodecatrienylamine

FS 3D CONCORD

MF C19 H35 N

CI COM

LC STN Files: BEILSTRIN*, ATOSIS, CA. CAOLD, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

(*File contains numerically searchable property data)

**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT **

18 REFERENCES IN FILE CA (1907 TO DATE)

18 REFERENCES IN FILE CAPLUS (1907 TO DATE)

6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L2 ANSWER 5 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN 7226-72-4 REGISTRY

ED Entered STN: 16 Nov 1984

CN 2,6,10-Dodecatrien-1-aminium, N,N,N-triethyl-3,7,ll-trimethyl-, bromide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CM Ammonium, triothyl(3,7,11-trimethyl-2,6,10-dodecatrienyl)-, bromide (8C1)

CN Triethyl(3,7,11-trimethyl-2,6,10-dodecatrienyl)ammonium bromide (7CT)

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OTHER NAMES:
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CN Farnosyl triethylammonium bromide

MF C21 H40 N . Br

LC STN Files: CA, CAOLD, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

CRN (756754-34-4)

Br-

5 REFERENCES IN FILE CA (1907 TO DATE)

5 REPERENCES IN FILE CAPLUS (1907 TO DATE)

2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L2 ANSWER 6 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

rn 6874-67-5 registry

PD Entered STN: 16 Nov 1984

CN 2.6,10-Dodecatriene, 1-bromo-3,7.11-trimethyl- (6CI, 7CI, BCI, 9CI) (CA
INDEX NAME)

OTHER NAMES:

CN 1-Bromo-3,7,11-trimethyl-2,6,10-dodecatriene

CN Farnesyl bromide

F9 3D CONCORD

MP C15 H25 Br

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMINFORMRX, CSCHEM, IFICDB, IFIPAT, IFIUDB, PS, TOXCENTER, USPATFULL (*File contains numerically searchable property data)

**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT **

130 REFERENCES IN FILE CA (1907 TO DATE)
130 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L2 ANSWER 7 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN 6784-46-9 REGISTRY

ED Entered STN: 16 Nov 1984

CN 2,6,10-Dodecatrien-1-amine, 3,7,11-trimethyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,6,10-Dodecatrienylamine, 3,7,11-trimethyl- (7CI, 8CI) OTHER NAMES:

CN Farnesylamine

FS 3D CONCORD

MF C15 H27 N

CI COM

LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMINFORMRX, IFICUB, IFIFAT, IFIUDB, MEDLINE, TOXCENTER, USPATFULL (*File contains numerically searchable property data)

Me2C=CH-CH2-CH2-CH2-CH2-CH2-CH2-NH2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

22 REFERENCES IN FILE CA (1907 TO DATE) 22 REFERENCES IN FILE CAPLUS (1907 TO DATE) 3 REFERENCES IN FILE CAOLD (PRIOR TO 1967) Appellants' Brief U.S. App. Ser. No. 10/502,014

RELATED PROCEEDINGS APPENDIX

Submitted herewith are copies of decisions rendered by a court or the Board in any proceeding identified about in Section II pursuant to 37 C.F.R. § 41.37(c)(1)(ii).

None



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Docket No: Q82625

Tsukasa AGA

Appln. No.: 10/502,014

Group Art Unit: 1713

Confirmation No.: 8458

Examiner: Mei Qi Huang

Filed: July 20, 2004

For:

AQUEOUS WATER-AND OIL-REPELLENT DISPERSION

SUBMISSION OF APPEAL BRIEF

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. A check for the statutory fee of \$500.00 is attached. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

egistration No. 40,641

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23373

CUSTOMER NUMBER

Date: August 4, 2006